

Ecological Impact Assessment



Ryebank Farm, Climping, Sussex

Principal Author: Helen Larzleer MSc

Address:

ADAS Ltd, 11D Park House
Milton Park, Abingdon
Oxfordshire, OX14 4RS

Date: October 2017

Commissioned For:

Mr James Baird



000001 000001

Quality Assurance

Author	Checked/Approved	Project Manager
Helen Larzleer MSc GradCIEEM	Nick Masters MSc. MCIEEM	Nick Masters MSc. MCIEEM

Disclaimer

Copyright RSK ADAS Ltd. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written consent from RSK ADAS Ltd. If you have received this report in error please destroy all copies in your possession or control and notify RSK ADAS Ltd.

This report has been commissioned for the exclusive use of the commissioning party unless otherwise agreed in writing by RSK ADAS Ltd; no other party may use, make use of or rely on the contents of the report. No liability is accepted by RSK ADAS Ltd. for any of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in this report are on basis of RSK ADAS Ltd. using due skill, care and diligence in the preparation of this report and no explicit warranty is provided as to its accuracy. It should be noted that no independent verification of any of the documents supplied to RSK ADAS Ltd. has been made.

Revision History

Revision	Date	Amendment
	27/10/2017	1 ST ISSUE

Contents

1	Summary	1
2	Introduction.....	3
2.1	<i>Background and survey objectives</i>	<i>3</i>
2.2	<i>Site description</i>	<i>3</i>
2.3	<i>Description of the proposed development</i>	<i>4</i>
3	Methodology	5
3.1	<i>Desk study</i>	<i>5</i>
3.2	<i>Field survey.....</i>	<i>5</i>
3.3	<i>Assessment and evaluation</i>	<i>5</i>
3.4	<i>Zone of influence</i>	<i>6</i>
3.5	<i>Limitations.....</i>	<i>6</i>
4	Baseline ecological conditions	6
4.1	<i>Designated sites</i>	<i>6</i>
4.2	<i>Priority habitats</i>	<i>7</i>
4.3	<i>Habitats</i>	<i>7</i>
4.4	<i>Species and species groups.....</i>	<i>8</i>
5	Ecological constraints, opportunities and recommendations	10
5.1	<i>Designated sites</i>	<i>10</i>
5.2	<i>Section 41 habitats</i>	<i>10</i>
5.3	<i>Species and species groups.....</i>	<i>11</i>
6	Assessment of impacts	12
6.1	<i>Statutory designated sites</i>	<i>12</i>
6.2	<i>Non-statutory designated sites</i>	<i>12</i>
6.3	<i>Section 41 habitats</i>	<i>12</i>
6.4	<i>Protected species.....</i>	<i>12</i>
6.5	<i>Section 41 species.....</i>	<i>13</i>
7	Summary of mitigation and enhancement	14

8	Conclusions.....	15
9	References	16

Appendices

Appendix 1: Phase 1 Habitat Survey Map

Appendix 2: Site Photographs

Appendix 3: Frame of Reference for Geographical Importance

Appendix 4: Planning Policy and Relevant Legislation

1 Summary

Mr. James Baird wishes to convert the existing commercial property at Ryebank Farm to residential use, relocating the commercial enterprise to a new site at Hobbs New Farm, approximately 700m to the west.

Mr. Baird commissioned ADAS to produce a Biodiversity Report in respect of the commercial property at Ryebank Farm (hereafter referred to as 'the site') in order to support a planning application. An extended Phase 1 survey was conducted at the site and the main issue identified was the low potential for water voles, which may be present in the offsite ditch adjacent to the northern site boundary.

Overall the site was of less than local / negligible value. With the recommended mitigation measures in place the overall impacts on biodiversity would be natural. With the implementation of some or all of the suggested enhancement measures, the proposal would be expected to achieve a net biodiversity gain.

Action	Rationale	When
Mitigation		
Method Statement (reptiles)	Very low risk of individual animals being encountered in small areas of the site.	To be produced prior to commencement of works.
Control of light spill through directional lighting.	To reduce light spill that may affect foraging bats.	Construction and operational phases as required.
Badger activity checks.	Evidence of badgers commuting on site.	During key stages of application.
Trenches to be covered overnight.	Badger and otter may disperse across the site at night.	Duration of works.
A 5 metre exclusion zone must be maintained from the top of Ryebank Rife, adjacent to the northern site boundary.	The banks of the rife were suitable for water voles.	Duration of works.
Nesting bird checks.	Suitable nesting habitat present across site. Checks required if vegetation removal carried out during March – August.	March - August inclusive.
Enhancements		

Action	Rationale	When
Native planting throughout site.	To increase and maintain connectivity/wildlife corridors across the site.	Planting once main construction works are complete.
Bat and bird boxes.	Increase roosting and nesting sites for bats and birds.	During operational phase.

2 Introduction

2.1 Background and survey objectives

Mr. J Baird wishes to convert the existing commercial property at Ryebank Farm to residential use, relocating the commercial enterprise to a new site at Hobbs New Farm, approximately 700m to the west.

Mr. Baird commissioned ADAS to produce a Biodiversity Report for the proposed development, in order to support a planning application. Ryebank Farm is located at grid reference: SU 99970 01201, and is hereafter referred to as 'the site'.

The site was the subject of a previous Phase 1 survey and report in 2009 (ADAS 2009), with a follow-on reptile survey having been undertaken in 2012 (ADAS 2012) and a bat inspection and emergence survey in May 2016 (King and Wright 2016). Due to the age of the Phase 1 and reptile surveys an updated report was required to determine whether habitats on site had changed significantly. An updated desk study was also undertaken to identify designated habitats which could be affected by any proposals for the site.

The purpose of this Ecological Impact Assessment is to provide updated information on the habitats and floral communities present at the site and describe how the proposed development plans are likely to impact on the ecological features.

This report has been prepared in accordance with guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM 2013 and 2016) and the British Standard 42020:2013.

The objectives of the report are to:

- Summarise the findings of the original and updated Phase 1 surveys, bat report and reptile report, in support of a planning application for the site; and
- Assess the likely impacts of the proposals on ecological features of importance such as protected species and notable habitats; and
- Make suggestions for avoidance, mitigation and enhancements, as appropriate.

2.2 Site description

The site was a former farm with disused grain silos, farm buildings and equipment currently used as a commercial property for making concrete. Present to the southwest of the development site was a concrete hard standing strip used for storage and two derelict greenhouses which were heavily overgrown with brambles. Immediately adjacent to the north was Ryebank Rife, managed as an agricultural drainage ditch. Immediately to the south was arable farmland. A network of arable fields dominated the wider landscape (see figure 1, below).



Figure 1. Site (indicated by red line boundary) and wider landscape

Reproduced from Ordnance Survey Digital data © Crown copyright. ADAS License No. AL 100020033. April 2010. Imagery taken from Microsoft Virtual Earth (Bing).

2.3 Description of the proposed development

Current plans for the site include a change of use of the existing barns into a residential property with associated lawns and gardens. The relocation of the commercial business to new facilities offsite.

2.3.1 Construction phase

During the construction phase of the development, vehicles and machinery will access the site via the existing hard standing tracks. Construction and materials storage will take place within the site boundary.

The existing barns under commercial use will be converted to a single residence, and the former grain silos will be removed. Areas of storage and scrub will be converted to parking areas, driveway and landscaped gardens. A buffer zone will be left between these gardens and the boundary of the site, in particular a 5 metre minimum exclusion zone will be maintained from the top of the rise adjacent to the northern boundary. Land take will be confined to within the site boundary.

2.3.2 Operational phase

When complete the development will house a single residence, with associated vehicles, noise, lighting and activity impacts.

3 Methodology

3.1 Desk study

A desk study was carried out in January 2017 to identify statutory designated sites within 5km and non-statutory designated sites of nature conservation importance within 2km. Records of protected and other notable species within a 2 km radius of the proposed development were also reviewed.

Sources consulted included:

- Multi-Agency Geographic Information for the Countryside (MAGIC) website
- Sussex Biodiversity Records Centre (SxBRC)
- Sussex Biodiversity Action Plan
- The Environment Agency

It is acknowledged that most species are greatly under-recorded and therefore a lack of records for a location should not be taken as an absence of the species concerned. Furthermore, a record for a particular habitat or species does not necessarily confirm its current presence.

3.2 Field survey

A Phase 1 Habitat survey was conducted on the 24th of January 2017 by Helen Larzleer MSc, based on the techniques and methodologies described in the Handbook for Phase 1 Habitat Survey (JNCC, 2010) and using standard nomenclature (Stace, 2010). The habitats present were recorded on to a field map with written target notes providing supplementary information on, for example, species composition structure and management where relevant.

This was extended to include notes on fauna and habitats which could potentially support protected and notable species, an approach commonly referred to as an Extended Phase 1 Habitat Survey. The presence of, or potential for, protected species was noted on the field map during the survey.

3.3 Assessment and evaluation

The importance of the habitat features on site were evaluated in a geographical context. The frame of reference for the habitat features in terms of their geographical importance is in line with guidance set out in CIEEM 2016.

Species are assessed, where appropriate, against best practice guidelines such as the Bat Conservation Trust 3rd edition (2016).

As part of the evaluation, recommendations for mitigation and enhancement are proposed to avoid or reduce potential impacts posed by the proposed development.

3.4 Zone of influence

The assessment conducted for this report has considered the area in which ecological features could be subject to significant effects from the proposed development. The area of the potential effects is often wider than the actual perimeter of the development site and is known as the Zone of Influence.

The Zone of Influence varies for different ecological features and each designated site, habitat and species has been considered in relation to their sensitivity to the proposed development.

3.5 Limitations

The survey was carried out on a frosty, clear day during January 2017. The survey effort, methodology and results are likely to provide an accurate account of the broad habitat types and the potential presence or absence of protected and notable species. Although January is outside of the optimal period for undertaking a detailed botanical survey, the results are sufficient to provide an accurate account of broad habitat types considering the limited habitat diversity and easily-recognisable habitats which dominated the site.

If major revisions to the proposed site boundary occur before works begin this report may need amending. Any appreciable delay in making reference to this report may necessitate a re-survey.

4 Baseline ecological conditions

4.1 Designated sites

Statutory sites

There were two sites with statutory designations within 5km of Ryebank Farm (shown in Table 1, below).

Table 1: Statutory sites within 5km

Site Name	Designation	Reason for designation	Distance and direction from development (km)
Climping Beach and West Beach	SSSI, LNR	Shingle beach and sand dune system with intertidal zone that supports important populations of wintering birds.	1.3 ESE

LNR – Local Nature Reserve

SSSI – Site of Special Scientific Interest

Non-statutory sites

There were two sites with non-statutory designations within 2km of the development (shown in Table 2 below).

Table 2: Non-statutory sites within 2km

Site Name	Description	Designation	Distance and direction from development (km)
Littlehampton Golf Course and Atherington Beach	The southern edge of the golf links includes an area of dry dune grassland, adjacent to the sand dune system of Climping Beach SSSI. The site also includes an area of vegetated shingle beach, a nationally uncommon habitat.	SNCI	0.9 SE
Elmer Rocks	Elmer beach is a fine example of vegetated shingle, an internationally rare habitat. The intertidal area supports a diverse community including intertidal sand and eight 'rock islands' constructed in the early 1990s in the mid-tide zone to form a coastal defence against the eroding coastline.	SNCI	1 SW

SNCI – Site of Nature Conservation Interest (Local Wildlife Site)

4.2 Priority habitats

A search using the MAGIC website (accessed January 2017) did not highlight any listed priority habitats. A broadleaved woodland strip was present adjacent to the north and the southeast of the site, parallel to the ditches.

4.3 Habitats

The following habitats were recorded on the site and are described below and mapped onto a Phase 1 habitat map (appendix 1). Photographs illustrating the habitats on site are shown in appendix 2.

- Buildings;
- dense scrub;
- hard standing;
- introduced shrubs;
- poor semi-improved grassland; and
- tall herb/ruderal.

4.3.1 Buildings

Two traditional flint and brick barns with corrugated roofs and five disused corrugated metal grain silos were present on site, as well as smaller scattered storage containers, small outbuildings and two derelict and overgrown greenhouses. All buildings were single-skinned, with numerous entrances, gaps and damaged or missing sections of roofing (photos 1 to 4).

4.3.2 Dense scrub

Areas of dense bramble (*Rubus fruticosus*) were present. The majority of the northeast portion of the site was overgrown (photo 6).

4.3.3 Hard standing

Large areas of hard standing in the form of concrete access tracks and work yard were present within the site boundary (photo 3).

4.3.4 Introduced shrubs

Scattered buddleia (*Buddleja davidii*) bushes were present across the site.

4.3.5 Poor semi-improved grassland

Fringes of rough, poor semi-improved grassland fringed the site (photo 5). These appeared to be trails, used by both walkers and wildlife. These were dominated by false-oat grass (*Arrhenatherum elatius*) with frequent cocksfoot (*Dactylis glomerata*) and Yorkshire fog (*Holcus lanatus*).

4.3.6 Tall herb/ruderal

Bracken (*Pteridium aquilinum*) and ruderal vegetation were present within the bramble dominated area at the west of the site, along the access track.

4.3.7 Off-site waterbodies

No waterbodies were present onsite, although two ditches were present adjacent to the northern and south eastern site boundaries (photos 7 and 8). No ponds were present within 250m of the site.

4.4 Species and species groups

4.4.1 Amphibians

There were numerous records for great crested newt (GCN) (*Triturus cristatus*) in the area, to the south and northeast. The nearest GCN record was 340m to the south, within the grounds of the hotel.

In addition, common frog (*Rana temporaria*), smooth newts (*Lissotriton vulgaris*) and palmate newts (*Lissotriton helveticus*) and common toad (*Bufo bufo*) were recorded in a similar distribution to the GCN records.

The scrub and rough grassland on site, although limited in size, offered suitable terrestrial habitat for common and widespread amphibians.

The site is highly unlikely to support great crested newts due to the lack of suitable waterbodies within 250m of the site, and therefore this species does not require further consideration

4.4.2 Badgers

There was a confirmed badger (*Meles meles*) sett approximately 170m to the west of the site.

There were numerous mammal trails across the site, but only few signs of digging in the northern grassy portion of the site. Based on the lack of setts, the site is considered to represent a small foraging resource only, and is therefore of less than local value in this respect.

4.4.3 Bats

There were twelve bat records within 2km of the site. These included serotine (*Eptesicus serotinus*) common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's bat (*Myotis daubentonii*) and a long-eared bat species (*Plecotus* sp.).

The buildings on site had low suitability for roosting bats. All buildings were single-skinned and subject to high levels of disturbance. The grain silos were of corrugated metal construction, with open roofs providing limited opportunities for shelter.

Although there were several locations with opportunities for low numbers of roosting bats all surfaces were covered with concrete dust and no signs of bats were found. The foraging capacity of the site was considered low due to the small size. The tree-lined ditches to the north and southeast of the site were suitable for foraging bats.

Due to the number of low-suitability potential roost locations, the buildings were the subject of a detailed internal inspection and emergence survey by licensed bat workers (King and Wright 2016). As the buildings were of 'low' suitability, the internal inspection and emergence survey complies with the current BCT guidelines for assessing buildings in support of a planning application. Their report stated that '*no evidence of roosting bats or significant evidence of bat use of the site was noted*'. During the emergence survey '*two common pipistrelles were briefly recorded feeding around the grain silos*'. The time of year and survey effort undertaken in relation to suitability of the building provides robust evidence as to the absence of roosting bats.

4.4.4 Birds

There were numerous birds within 2km of the site, with the majority being birds associated with the coastal habitats to the south. Farmland associated Schedule 1 birds within 2km of the site included red kite (*Milvus milvus*), hobby (*Falco subbuteo*), barn owl (*Tyto alba*), and Cetti's warbler (*Cettia cetti*). The scrub and buildings across the site provided suitable nesting habitat for a number of bird species.

4.4.5 Hazel dormice

There were no records for hazel dormice (*Muscardinus avellanarius*) within 2km of the site. There were no habitats within the site boundary suitable for hazel dormice, and the scrub habitats are patchy and sparse. Therefore no further consideration in respect of this species is required.

4.4.6 Otters

There is a low likelihood that otters are present within the larger portions of Ryebank Rife, and may be using the adjacent ditch and portions of the site for dispersal.

4.4.7 Reptiles

There were records for slow-worm (*Anguis fragilis*) and common lizards (*Zootoca vivipara*) within 2km of the site. The nearest record was for a slow-worm 200m northeast. Edge habitats between the ditch, scrub and rough grassland provided suitable habitat for common reptiles. The ADAS reptile survey undertaken in 2012 covered a wider area than the current site and over the course of seven site visits did not find any reptiles. This implies no or very low numbers of reptiles were utilising the site. As the site has not changed this level of use is likely to still be accurate.

4.4.8 Water vole

There were eight records of water vole (*Arvicola amphibius*) within 2km of site, 1.3km west and 0.9km east, associated with Ryebank Rife. The overgrown ditch at the north of the site provided suitable habitat for water voles.

4.4.9 White-clawed crayfish

There were no records of white-clawed crayfish (*Austropotamobius pallipes*) within 2km of the site, and the managed ditches adjacent to site were not suitable habitat.

4.4.10 Section 41 species

There were multiple records of hedgehogs (*Erinaceus europaeus*) within 2km of the site. The majority of the records were associated with Climping village, to the north. The nearest record was 200m northeast.

4.4.11 Non-native invasive plants

No Schedule 9 non-native invasive plants were identified during the survey, however there were areas of dense scrub which prevent a full assessment. In addition, January is outside of the optimal period for undertaking a detailed botanical survey.

5 Ecological constraints, opportunities and recommendations

5.1 Designated sites

Based on the location and small scale of the development it is anticipated that no designated sites will be affected by the proposed works.

5.2 Section 41 habitats

No Section 41 priority habitats will be affected by the proposed works, beyond potential impacts to fauna.

5.3 Species and species groups

5.3.1 Bats

Bat roosts are absent from the site, although it would be expected that various species may forage and commute through the general area. Sensitive lighting should be used for boundaries adjacent to woodland, to prevent disturbance to foraging and commuting bats.

5.3.2 Badgers

Badgers are mobile animals and can create new setts at any time of year, therefore it is recommended that a site inspection is carried out at key stages during the application to ensure the site has not had any new badger activity/sett creation. Trenches should be covered overnight or fitted with ramps of a suitable incline to allow escape.

5.3.3 Birds

The habitats present on site can provide widespread foraging and nesting habitat for a variety of species. Seasonal avoidance (i.e. timing vegetation removal to occur between the months of September to February inclusive) should be used to mitigate the risk of disrupting breeding activity. If it is not possible, a suitably experienced person will be required to check dense vegetation ahead of clearance. Should an active bird nest be found, a buffer of surrounding vegetation and a 5m no-disturbance perimeter should be maintained until the nest is no longer in use.

5.3.4 Otters

As there is a very low risk that otters may be using the network of ditches and waterways adjacent to the two sites. Therefore trenches should be covered overnight or fitted with ramps of a suitable incline to allow escape.

5.3.5 Reptiles

A reptile survey conducted by ADAS (2012) found no reptiles present on site. Very low levels of reptile activity can be difficult to rule out, and given that several species of reptile are abundant in the area, a safe working method statement to avoid harming reptiles should be prepared for work in areas of dense vegetation.

5.3.6 Water vole

Water vole may be using the network of ditches adjacent to the site boundaries. A 5m exclusion zone for machinery and groundworks will be maintained from the top of the bank, to avoid impacts to this species.

5.3.7 Section 41 species

There will be no impacts on Section 41 species.

5.3.8 Non-native invasive species

No invasive species were found during the surveys. However, vigilance for Schedule 9 invasive species should be maintained throughout site works. If any non-native invasive species are encountered during the removal of the dense scrub, then a Suitably Qualified Ecologist should be contacted for advice on how to proceed.

5.3.9 Ecological net gain

The national planning policy promotes the inclusion of measures to enhance biodiversity within development proposals. Developments must be sustainable and seek to produce a 'net gain' for biodiversity and nature conservation. Proposals must include new benefits for biodiversity, separate to those set out in the mitigation measures (CIEEM 2016).

The site at Ryebank Farm is considered to be of negligible / less than local ecological importance based on the frame of reference (Appendix 3).

Where possible, to enhance the potential for biodiversity net gain and taking into consideration the likely species present, it is recommended that scope for including bat boxes and bird boxes at suitable locations across the site. Native species planting should also be incorporated within the site design. Where it is not possible to use native species, ornamental plants of biodiversity benefit which provide year round cover, nectar, fruit and seed should be included.

6 Assessment of impacts

6.1 Statutory designated sites

Impacts upon statutory designated sites are thought to be negligible and have therefore considered to have a neutral affect.

6.2 Non-statutory designated sites

No non-statutory designated sites will be impacted by the proposed development.

6.3 Section 41 habitats

Impacts on Section 41 habitats are expected to be negligible.

6.4 Protected species

6.4.1 Amphibians

Given the absence of ponds, amphibians including great crested newt are not expected to be present, and therefore no impacts are anticipated.

6.4.2 Badgers

The proposals would result in no impacts to setts, but may result in the loss of a very small area of occasionally-used foraging habitat. This is considered to represent an impact of negligible magnitude.

6.4.3 Bats

Impacts would be limited to increased disturbance due to night time lighting for bats foraging along the adjacent ditches. The use of lighting during construction and the lighting implemented in the operational phase of the development may impact on bat activity, although effects are difficult to quantify.

The mosaic of sheltered habitats which would result from the refurbishment of buildings and creation of gardens, as well as enhancements in the form of bat boxes, would represent a long-term positive impact on bats.

6.4.4 Birds

As nesting bird checks are recommended before the removal of any buildings or dense scrub, direct impacts will not occur.

The proposals would result in a shift from unmanaged grassland and scrub to gardens. This will be of benefit to some species, while others may experience a minor negative impact.

6.4.5 Otter

No habitats used by otters will be impacted.

6.4.6 Reptiles

Reptiles are not believed to be present, except for a low likelihood of dispersing individuals using the small areas of suitable habitat. As such impacts would be addressed via an appropriate Method Statement, the overall impact on reptiles is therefore considered to be neutral.

6.4.7 Water vole

Mitigation to avoid impacting water voles has been recommended and therefore no direct impacts should occur. The overall impacts on water voles are therefore considered to be neutral.

6.5 Section 41 species

The proposals would result in no net change in the quality and extent of habitats for Section 41 species.

7 Summary of mitigation and enhancement

Table 3: Summary of recommended mitigation and enhancements

Action	Rationale	When
Mitigation		
Method Statement (reptiles)	Very low risk of individual animals being encountered in small areas of the site.	To be produced prior to commencement of works.
Control of light spill through directional lighting.	To reduce light spill that may affect foraging or roosting bats.	Construction and operational phases as required.
Badger activity checks.	Evidence of badgers commuting on site.	During key stages of application.
Trenches to be covered overnight.	Badger and otter may disperse across the site at night.	Duration of works.
A 5 metre exclusion zone must be maintained from the top of Ryebank Rife, adjacent to the northern site boundary.	The banks of the rife were suitable for water voles.	Duration of works.
Nesting bird checks.	Suitable nesting habitat present across site. Checks required if vegetation removal carried out during March – August.	March - August inclusive.
Enhancements		
Native planting throughout site.	To increase and maintain connectivity/wildlife corridors across the site.	Planting once main construction works are complete.
Bat and bird boxes.	Increase roosting and nesting sites for bats and birds.	During operational phase.

8 Conclusions

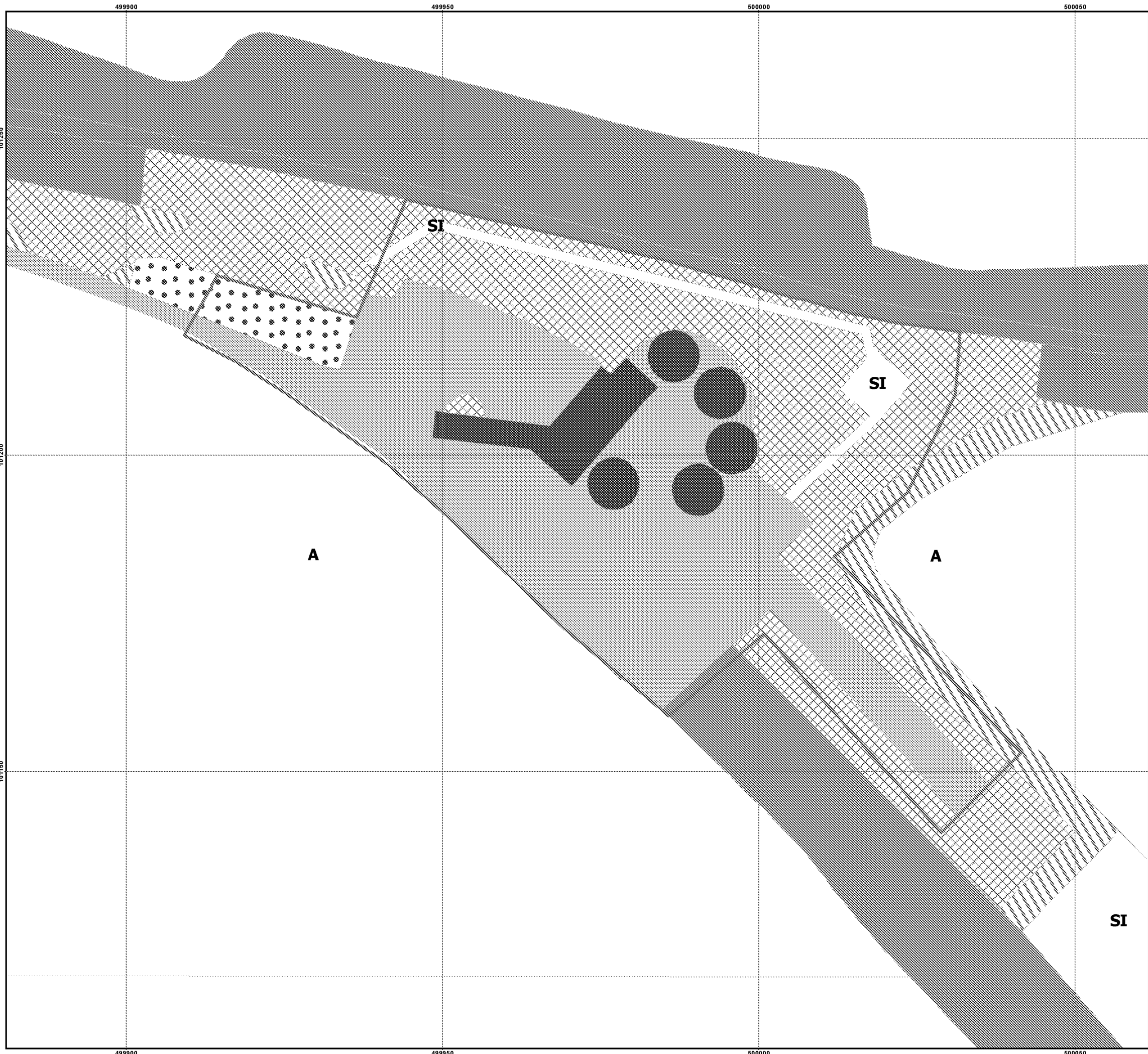
The site is considered to be of negligible / less than local value due to its small size and lack of notable habitats. Roosting bats have been shown to be absent, and reptile surveys (although several years old) have also failed to detect the presence of reptiles. Notwithstanding this, there is considered to be a low risk of encountering small numbers of animals during some of the planned site works; appropriate mitigation measures have been proposed to address this. In addition, minor enhancement measures have been suggested, which are proportionate to the scale of the proposals. With the recommended mitigation measures in place the overall impacts on biodiversity would be neutral. With the implementation of some or all of the suggested enhancement measures, the proposal would be expected to achieve a net biodiversity gain.

9 References

- ADAS (2009)** *Extended Phase 1 Habitat Survey and Protected Species Assessment. Ryebank Farm, Climping, West Sussex.*
- ADAS (2012)** *Reptile Survey. Ryebank Farm, nr Climping.*
- Bright, P., Morris, P. and Mitchell-Jones, A. J. (2006)** *The Dormouse Conservation Handbook 2nd Edition.* English Nature, Peterborough.
- BS42020:2013 Biodiversity – Code of Practice for Planning and Development.** BSI Standards Publication.
- BS5837:2012 Trees in relation to design and construction – Recommendations.** BSI Standards Publication.
- Chartered Institute of Ecology and Environmental Management (2013)** *Guidelines for Ecological Preliminary Ecological Appraisal. Technical Guidance Series.* www.cieem.net.
- CIEEM (2016)** *Guidelines for ecological impact assessment in the United Kingdom and Ireland: Terrestrial, Freshwater and Coastal. 2nd Edition.* Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (ed) (2016)** *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).* The Bat Conservation Trust, London.
- JNCC (2010)** *Handbook for Phase 1 Habitat Survey. A technique for environmental audit (reprint).* Joint Nature Conservation Committee, Peterborough.
- King, D. P. and Wright, S. L. (2016)** *Bat Survey Report. Barns at Ryebank Farm, Climping, West Sussex.*
- Stace, C. (2010)** *New British Flora of the British Isles. 2nd Edition.* Cambridge University Press.
- Sussex Biodiversity Records Centre (2016)** *Ryebank Farm, Climping, Sussex. Ref: SxBRC/16/734.*

Appendix 1: Phase 1 Habitat Survey Map

See following page.



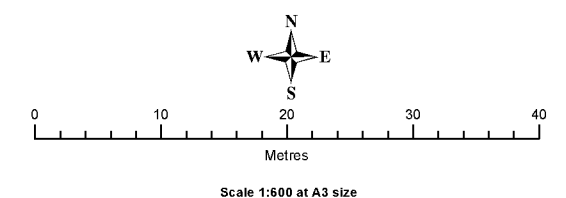
ADAS

Ryebank Farm
Climping, West Sussex

Phase 1 Habitat Plan

- Site boundary
- Semi-natural broadleaved woodland
- Dense/continuous scrub
- SI Poor semi-improved grassland
- Tall ruderal
- Standing water
- A Arable
- Introduced shrub
- Buildings
- Hard standing
- Bare ground

Drawn by Andy Frost 13/10/2017, Verified by Helen Larzleer 13/10/2017



Base mapping supplied by client from surveyed information.
For reference purposes only. No further copies may be made

RSK ADAS Ltd., Pendeford House,
Pendeford Business Park, Wobaston Road,
Pendeford, Wolverhampton, WV9 5AP
Tel +44(0)1902 271300, Fax +44(0)1902 785574



MC/EN2 SAL0018360

Appendix 2: Site Photographs

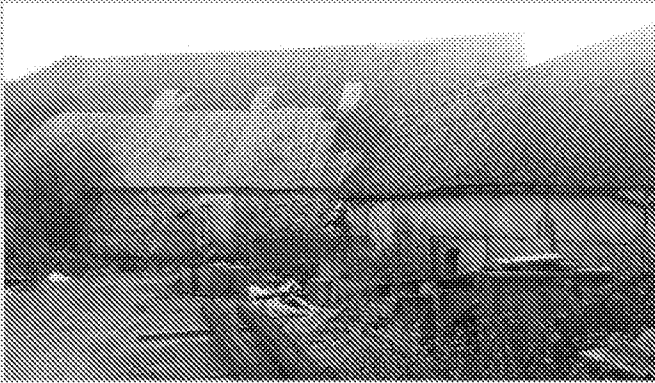


Photo 1: Exterior view of barns, north.



Photo 2: Interior view of main barn.



Photo 3: Exterior view of barns and access track, south.



Photo 4: Disused grain silos.

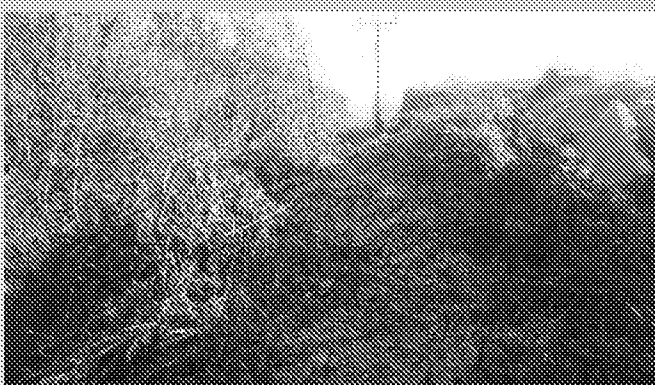


Photo 5: Poor semi-improved grassland track adjacent to northern ditch.

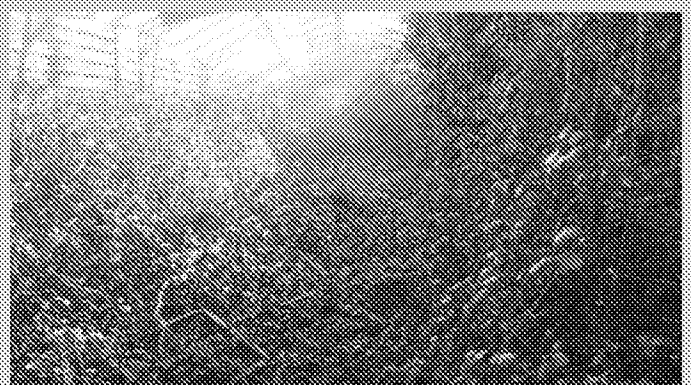


Photo 6: Disused greenhouse overgrown with scrub.



Photo 7: Ditch adjacent to northern site boundary.



Photo 8: Ditch adjacent to southeast site boundary.

Appendix 3: Frame of Reference for Geographical Importance

Geographical context	Examples
International and European value	Ramsar Sites, Special Protection Areas, Biosphere Reserves, Special Areas of Conservation. Sites supporting populations of internationally important species. Any regularly occurring population of an internationally important species, which is threatened or rare in the UK. I.e. it is a UK Red Data Book species or listed as occurring in 15 or fewer 10km squares in the UK (categories 1 and 2 in the UK BAP) or of uncertain conservation status or of global conservation concern in the UK BAP. A regularly occurring, nationally significant population/number of any internationally important species.
National value	SSSIs or non-designated Sites meeting SSSI selection criteria, NNRs, Marine Nature Reserves, NCR Grade 1 Sites. Sites containing viable areas of key habitats identified in the UK Biodiversity Action Plan. Any regularly occurring population of a nationally important species which is threatened or rare in the region or county (see local BAP). A regularly occurring, regionally or county significant population/number of any nationally important species.
Regional value	Sites containing viable areas of threatened habitats listed in a Regional BAP (or some Natural Areas), comfortably exceeding SINC criteria, but not exceeding SSSI criteria. Any regularly occurring, locally significant population of a species listed as being nationally scarce which occurs in 16-100 10km squares in the UK or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation; A regularly occurring, locally significant number of a regionally important species.
County / Metropolitan	Sites meeting the criteria for county or metropolitan designation (SNCI, CWS, etc.). Ancient semi-natural woodland, LNRs or viable areas of key habitat types listed in county BAPs/Natural Areas. Any regularly occurring, locally significant population of a species which is listed in a County/Metropolitan "red data book" or BAP on account of its regional rarity or localisation; A regularly occurring, locally significant number of a County/Metropolitan important species.
Local	Undesignated sites or features considered to appreciably enrich the habitat resource in the District or Borough or within a zone of influence. A population of a species that is listed in a District/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation; A regularly occurring, locally significant number of a District / Borough important species during a critical phase of its life cycle.
Negligible	Sites, habitats and species not meeting any of the above criteria with low grade and widespread habitats.

Appendix 4: Planning Policy and Relevant Legislation

National planning policy framework

The National Planning Policy Framework (NPPF) of March 2012 replaced the previous planning policy for biodiversity conservation; Planning Policy Statement 9 (PPS9). Paragraph 117 of the NPPF states that to minimise impacts on biodiversity, planning policies should:

- *Plan for biodiversity at the landscape scale, across local authority boundaries.*
- *Promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan.*

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles (paragraph 118):

- *Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted.*
- *Opportunities to incorporate biodiversity in and around developments should be encouraged.*

Natural Environment & Rural Communities Act 2006

Section 40 of the NERC Act 2006 places a duty upon all local authorities in England to promote and enhance biodiversity in all of their functions. Section 41 lists habitats and species of principal importance to the conservation of biodiversity. These habitats and species are a material consideration in the planning process.

Bats

Bats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 (as amended). It is illegal to kill or injure bats, cause disturbance at their resting places or to block access to, damage or destroy their roost sites.

Birds

Wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). It is illegal to take or harm them, their nests (whilst in use or being built) or their eggs.

Additionally for species listed in Schedule 1 of the Act it is an offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young.

Common reptiles

Slow-worm (*Anguis fragilis*), adder (*Vipera berus*), grass snake and common lizard are protected under the Wildlife and Countryside Act 1981 (as amended). It is illegal to kill or injure them.

It is not illegal to capture, disturb or to damage their habitats. However, the reptiles themselves are protected so any works to damage their habitat could risk causing harm to reptiles and hence could be illegal.

Otter

Otter and their habitats are protected under Schedule 5 (Section 9) of the Wildlife and Countryside Act 1981 (as amended) and under Conservation of Habitats and Species Regulations 2010. It is illegal to kill, injure, capture, or disturb them. In addition their breeding and resting sites (e.g. otter holt) are protected from being damaged or destroyed.

Great crested newts

GCN are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 (as amended). It is illegal to kill, injure or disturb GCN and to damage or destroy their breeding and resting places.

Water vole

Water voles are protected under Schedule 5 (Section 9) of the Wildlife and Countryside Act 1981 (as amended). It is illegal to kill, injure or take a water vole and to damage, destroy or obstruct any place which they use for shelter or protection.

White-clawed crayfish

White-clawed crayfish are protected under Schedule 5 (Section 9) of the Wildlife and Countryside Act 1981 (as amended). It is illegal to take or sell white-clawed crayfish.

Non-native invasive species

Section 14(2) of the Wildlife and Countryside Act (1981) (as amended) states that *"if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence."*

In addition, The Environmental Protection Act (1990) contains a number of legal provisions concerning "controlled waste", which are set out in Part II. For example, any Japanese knotweed contaminated soil or plant material that is required to be discarded is likely to be classified as controlled waste and will need to be disposed of at a suitably licensed landfill.